

# **The Story of Bottled Water**

**Dr. John T. O'Connor, PE**

**Tom O'Connor, PE**

**H<sub>2</sub>O'C**  
ENGINEERING

The modern history of bottled water

has been dramatic for its creative marketing,  
rapid growth in sales worldwide, and now, seemingly,  
its incipient decline.



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## 1820 - Early Rationale for Bottling Water

Drinking water has been stored in and, from earliest times, filtered through earthenware for over 7000 years.

One of the first bottled waters sold in the United States was the Reverend D. O. Griswold's

*Sarasota Springs spring water.*

Hawked under the name *Doctor Clark*, in 1820, it was advertised as a cure for stomach ailments.





**5,000  
B.C.E.**

**Earthenware  
for water  
sedimentation  
filtration  
storage**

**Middle East**



**1845  
C.E.**

**Hiram Ricker's  
springwater as  
cure for kidney  
ailments**

**Poland Spring,  
Maine**



**20'C  
ENGINEERING**



## 1845 - Good for What Ails You!

The first drinking water to become widely available in the U.S. was Hiram Ricker's spring water which was sold as a cure for kidney ailments.

Hiram's water was bottled in *Poland Spring, Maine* as early as 1845.

Available locally in pottery jugs, three gallons sold for 15 cents.





# 1960 - Colored Glass Bottles



Dark colored glass  
to protect against  
sunlight, algae.



$\text{CaCO}_3$  precipitates





# Mid-Twentieth Century - the Birth of an Industry

Water was generally bottled in glass which sometimes had a dark color to protect the contents against sunlight and limit the growth of algae.

Colored glass also tended to hide precipitates, such as calcium carbonate, which sometimes accumulated in the bottom of the bottles.



# 1968 Dupont polyethylene terephthalate

PET invented by  
*Nathaniel Wyeth*  
(brother of painter Andrew)

1 kg of PET  
requires about  
2 kg of oil  
and produces  
3 kg of CO<sub>2</sub>

**PET**  
**saves on**  
**shipping**

**Non-**  
**returnable**  
**containers**

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## 1968 - Bottled Water Goes Plastic

Water is heavy and expensive to transport, particularly when enclosed in thick glass. However, the development of clear polyethylene terephthalate (PET) by DuPont engineer, Nathaniel Wyeth, lightened the burden of shipping and stimulated the marketing of water with bright, attractive packaging of many sizes, colors, and complex shapes.



# 1977 Perrier

introduces the fashion  
accessory for yuppies:  
its bowling-pin-shaped,  
green bottle



## Bottle Sizes

(and water contents)

begin to decrease



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## 1977 - The Miracle of Marketing: Perrier Ice Cubes for Eskimos

Perrier entered the U.S. market with a distinctive green, pin-shaped bottle. Promoted in an imaginative nationwide marketing program, its sales reached \$20 million in its first year and tripled in the following year.

As a *'fantasy gift'*, Neiman-Marcus reportedly offered a swimming pool filled with Perrier.





# Downsizing - with style





# Flavored Canadian Water





Ireland

England

Belgium

Italy





Germany

France

Europe

Yugoslavia





# 1978 - The Bottle as Fashion Statement

Bottled in France since 1826 for its medicinal properties, Evian surfaced in 0.5 litre PVC bottles in 1969.

Thereafter, Evian launched a sculpted bottle for the *Winter Olympic Games at Albertville*.

In 1992, Evian premiered the launch of a PET bottle which was '*completely collapsible*', presumably to save landfill space.

*Evian Millennium* limited edition bottle (1999) marked the millennium.

The *Evian Nomade* (2000); *Evian Affinity* (2001); Evian 1 litre



# Marketing Poland Spring

Ride! Rock! Choose! Win! Movies! DVD!  
-- and, **oh yes!** water!

**RULE THE RIDES!**  
**SHREK 2**  
NOW ON DVD

**4D**

**HOLLYWOOD**

**FEEL LIKE A MOVIE STAR!**

**Choose Your Adventure!**

**UNIVERSAL STUDIOS**  
THEME PARKS

**Enter to win at**  
**PolandSpring.COM**

**LIVE LIKE A ROCK STAR!**

**PLEASE RECYCLE**

**0 75720 00081 4**

**ME 5¢ REFUND**

**Poland Spring**  
BRAND  
NATURAL SPRING WATER  
FROM MAINE SINCE 1845

**.5 L**  
**(1 PT, 0.9 FL OZ)**

No Purchase Necessary. Must be a legal U.S. resident currently residing in the 49 United States, other than Florida, 18 years or older. Void in Florida and where prohibited. For full Official Rules, eligibility and complete prize description, go to [www.polandspring.com](http://www.polandspring.com). Sweepstakes ends 12/28/05. Shrek 2 and 4-D TM & © 2005 DreamWorks Animation L.L.C. Universal elements and all related indicia TM & © 2005 Universal Studios. All rights reserved. Hollywood Sign™ & © 2005 Hollywood Chamber of Commerce. Licensed by Global Icons, LLC. All Rights Reserved.

Sources: Poland Spring, Poland Spring, ME; Evergreen Spring, Fryeburg, ME and/or Garden Spring, Poland, ME. Poland Spring Water Company Division of Nestlé Waters North America Inc. Greenwich, CT 06830 © 2005 CT #408, NYSHD Cert. #072

Questions? Comments? Call 1-800-4-SPRING

Now brought to you by **Nestlé**, the Swiss Company that sells water throughout North America!

Enjoy your ride!

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# U.S. - Arrowhead

## Nestlé Mountain Spring Water

**"It's Better Up Here!"**

It's Better Up Here!®

Arrowhead comes to you exclusively from natural mountain sources in the United States and Canada.



Arrowhead Mountain Spring Water Company  
Division of Nestlé Waters  
North America Inc.  
Greenwich, CT 06830  
© 2006

Questions? Comments?  
Call 1-800-873-7775



Since 1894, people have been enjoying the pure, crisp taste of Arrowhead® Brand Mountain Spring Water—a water that comes from natural mountain springs, with a taste as refreshing as nature itself. We hope you enjoy Arrowhead as much as we love bringing it to you.

[arrowheadwater.com](http://arrowheadwater.com)



1 L  
(1 QT,  
1.8 FL OZ)

Despite advertising illusions,

most of the water sold in the U.S. is groundwater;

25% is derived from municipal water sources.

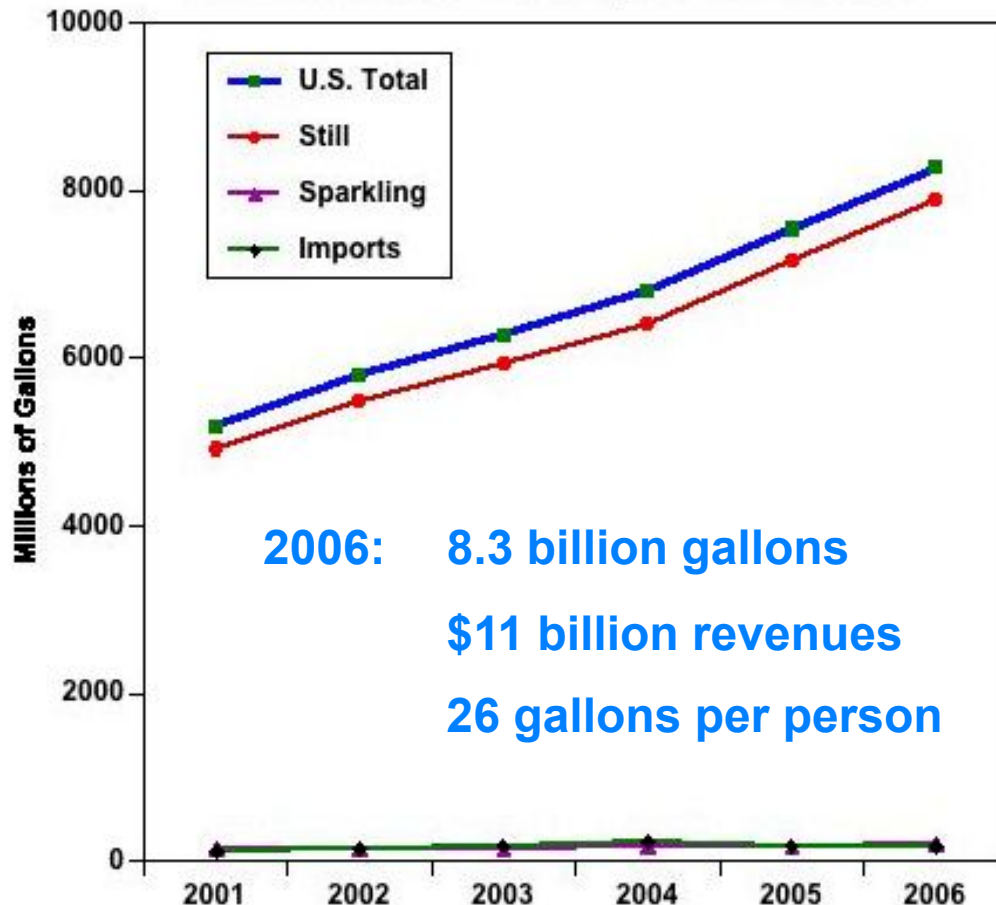
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# U.S. Bottled Water Consumption

≈ 10% Annual Growth

U.S. Bottled Water Consumption - 2001 to 2006



## Suppliers to Bottlers

- Activated Carbon Products
- Bottle Closures
- Bottling Equipment
- Carry Handles
- Color Label Printers
- Computer Services, Software
- Coolers; Chillers
- Labels and Packaging
- Oxygen Related Products
- Ozone, UV, R.O. Systems
- Packaging (PET)
- Plastic Bottle Equipment
- Process Technology
- Trucks and Transportation
- Water Sources (Wells)
- Water Treatment Plants

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# 2000 - 2007 - Bottled Water Sales Surge

Bottled water sales experience extraordinary growth (approximately, 10% annually) creating demand for the increased production of PET plastic and the need for a variety of small-scale treatment units and bottling supplies.

A close-up photograph of a water droplet hitting a surface, creating a series of concentric ripples. The water is dark blue, and the ripples are highlighted with a bright, shimmering light. The background is black.

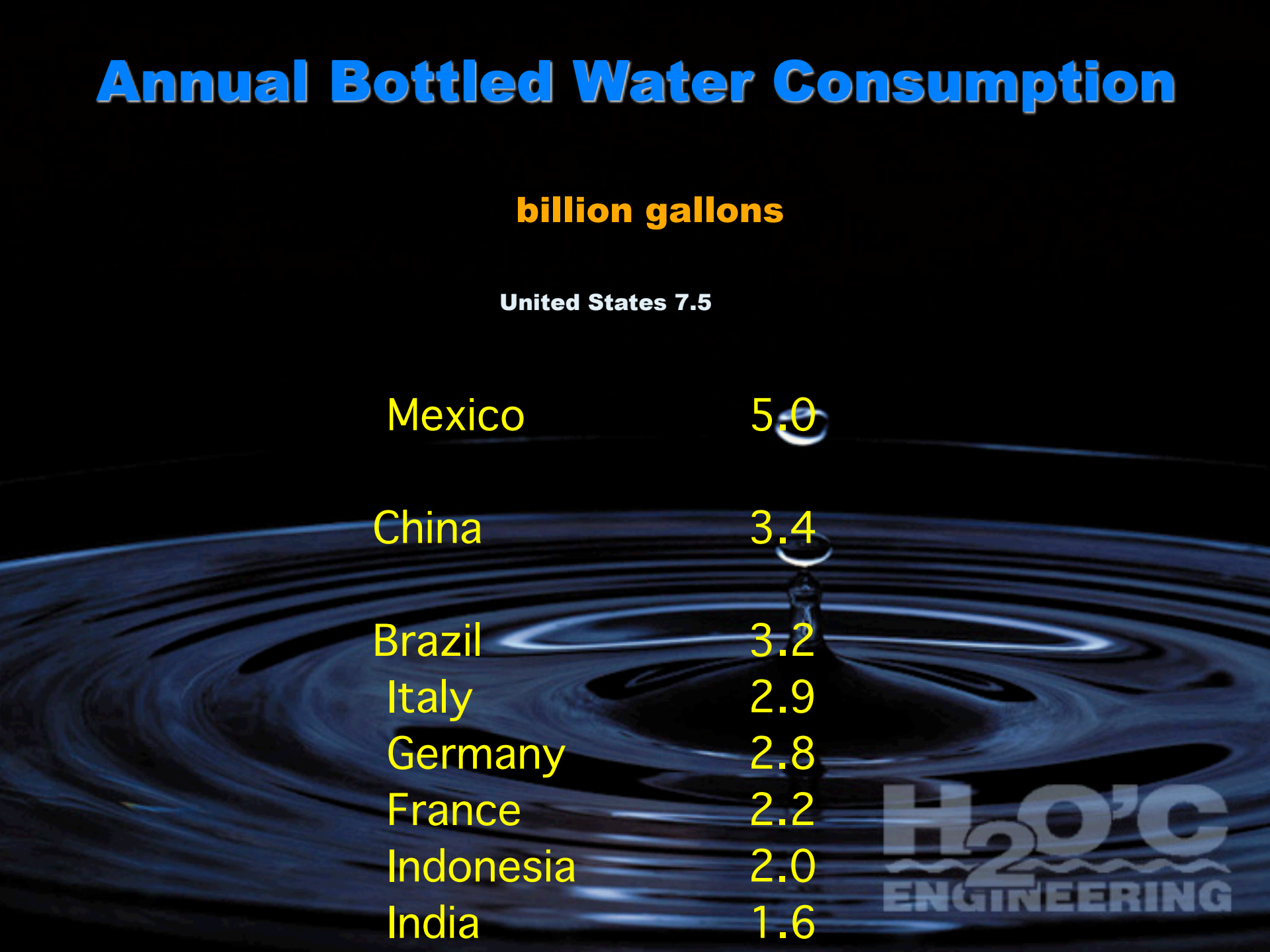
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# Annual Bottled Water Consumption

**billion gallons**

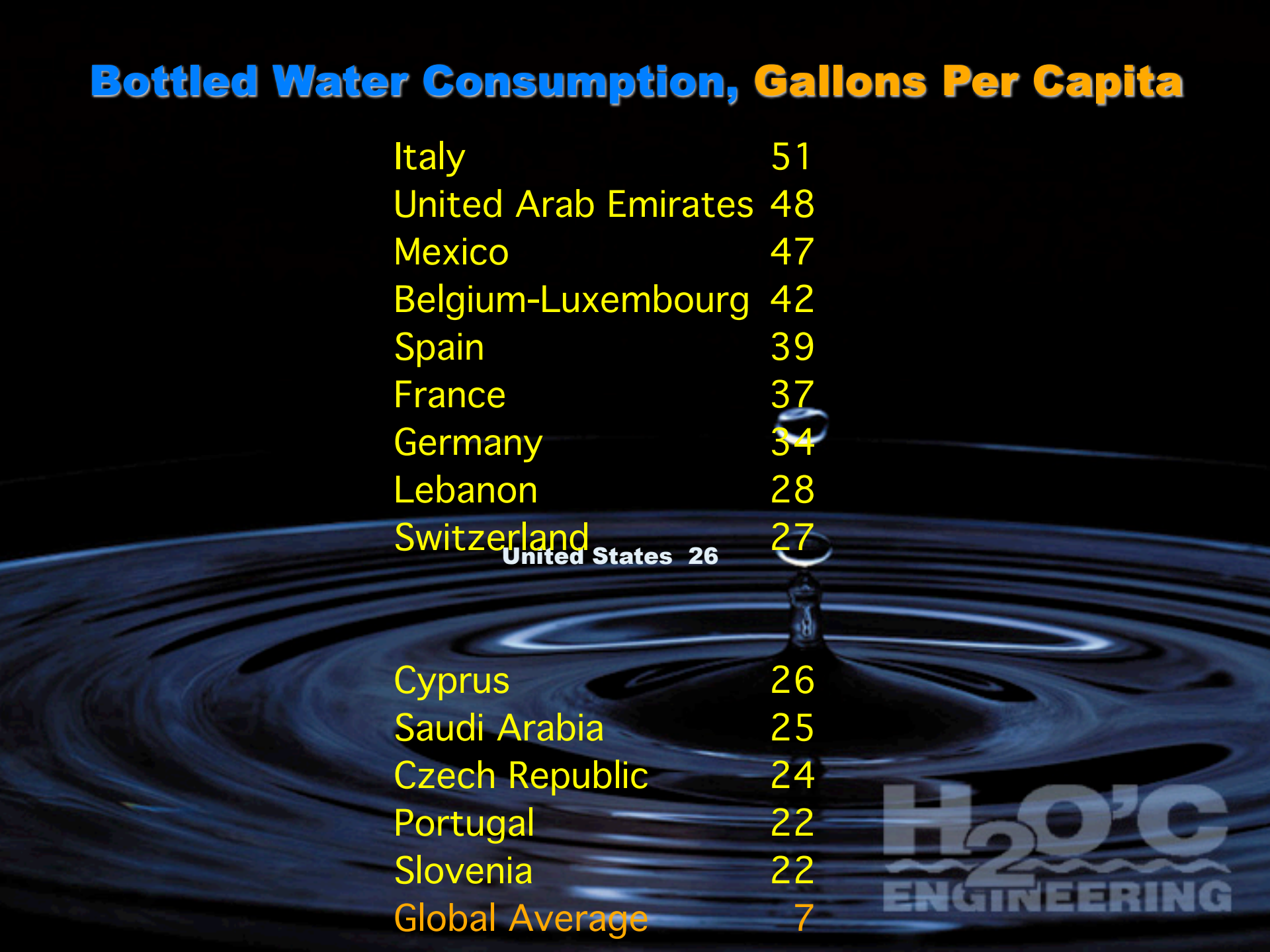
**United States 7.5**



Mexico	5.0
China	3.4
Brazil	3.2
Italy	2.9
Germany	2.8
France	2.2
Indonesia	2.0
India	1.6

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# Bottled Water Consumption, Gallons Per Capita



Italy	51
United Arab Emirates	48
Mexico	47
Belgium-Luxembourg	42
Spain	39
France	37
Germany	34
Lebanon	28
Switzerland	27
United States	26
Cyprus	26
Saudi Arabia	25
Czech Republic	24
Portugal	22
Slovenia	22
Global Average	7



Arkansas      Missouri      Maine      Yugoslavia



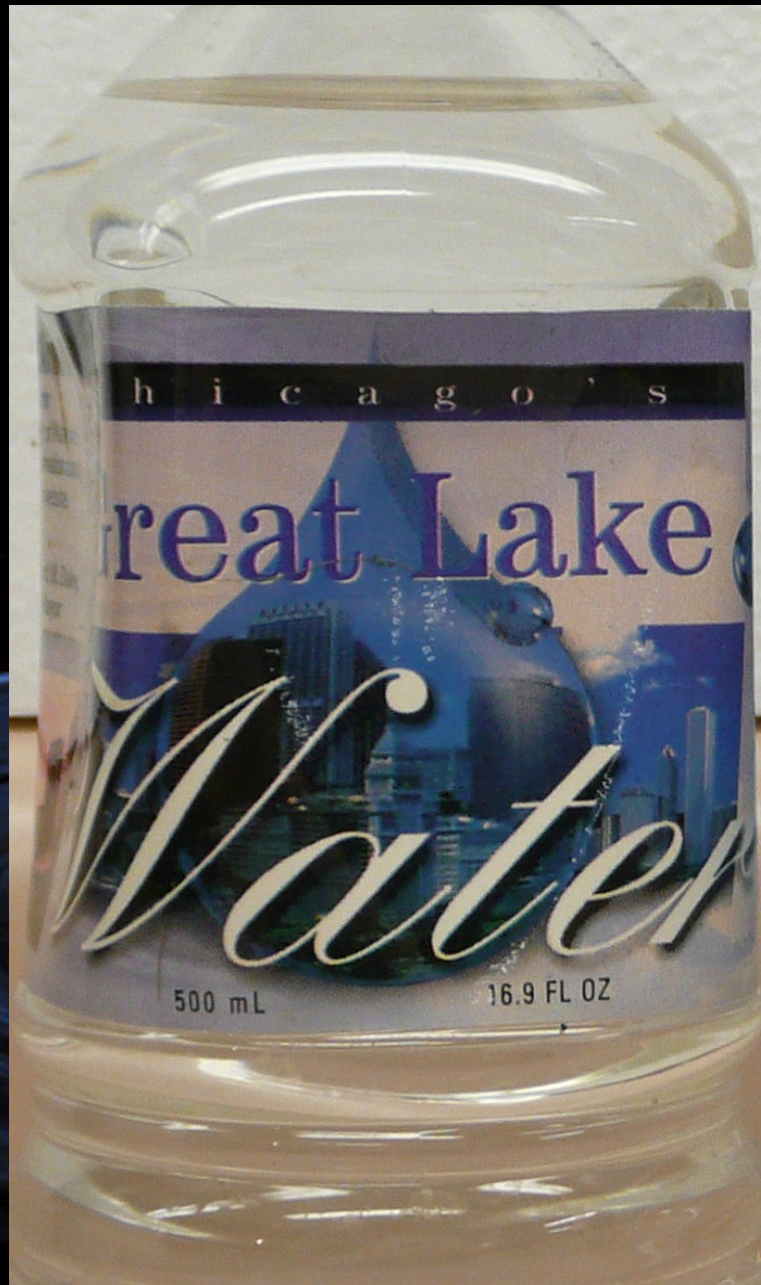


# St. Louis    Kansas City    Chicago    Okla. City





# Chicago! 'Great Lake' or 'Deep Artesian'!







8 ounces  
**MORE**  
THAN 1 GALLON

CRYSTAL PURE FROM WISCONSIN  
**GLACIAL WATER**

**BUFFALO DON'S**

**PURE ARTESIAN  
DRINKING WATER**

Contains less than 1 mg. sodium per 8 oz. serving.

**SALT FREE**

136 FL. OZ. (ONE GAL. + 8 OUNCES)

IBWA Bottler Member

Wishicot, WI 54228 U.S.A.

BUFFALO DON'S ARTESIAN WELLS, Ltd.



**KANDIYOHI**  
*Premium Water*

**DRINKING  
WATER**

Prepared by distillation  
Selected minerals added for taste

INGREDIENTS: DISTILLED WATER, CALCIUM CHLORIDE,  
POTASSIUM BICARBONATE, MAGNESIUM CHLORIDE.

**ONE GALLON (3.79 L)**

KandiyoHi Bottled Water Co.  
Willmar, MN 56201  
An IBWA Bottler Member

0 13073 54204 9





**8 ounces more  
than 1 gallon ?**

**Gallon jug ruptured  
releasing all of**

**Buffalo Don's**

**Crystal Pure  
Artesian Glacial Water  
onto my bookshelf**

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# Minnesota Distilled Water

-- with tasty salts added back in!

## DRINKING WATER

*Prepared by distillation  
Selected minerals added for taste*

INGREDIENTS: DISTILLED WATER, CALCIUM CHLORIDE,  
POTASSIUM BICARBONATE, MAGNESIUM CHLORIDE.

ONE GALLON (3.79 L)

*Kandiyohi Bottled Water Co.  
Willmar, MN 56201*

An IBWA Bottler Member

C  
RING



# “Never Hit the Ground ...”

## “...proud purveyor of fresh squeezed cloud juice.”

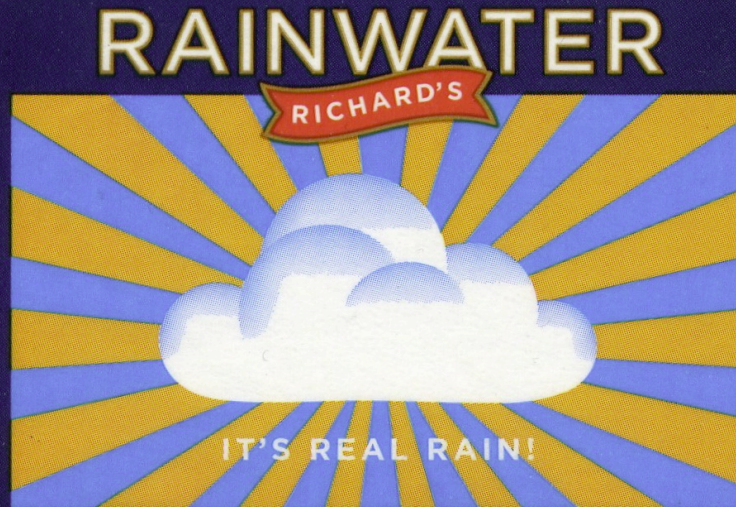
### ‘jes don’ get no bettern’ that!



Who reads labels? You, it seems. Maybe you're trying to find out if this is real rainwater. Well, it is. I harvest it straight from the source—clouds. That means it never hit the ground, a claim no other bottled water in America can make. Maybe you want to know if I filter it. Oh, yeah. We're talking the ultimate in purification—reverse osmosis. Maybe you're wondering how it tastes? To find that out, it's time to stop reading and take a sip.

#### RICHARD HEINICHEN

*Proud Purveyor of fresh squeezed Cloud Juice™, the Original Rainwater.*



**MADE BETWEEN HEAVEN AND EARTH  
OVER DRIPPING SPRINGS, TEXAS**

PURIFIED DRINKING WATER 16 FL OZ

#### NUTRITION FACTS

Serving Size 8 fl oz (240 ml)  
About 2 Servings per container

##### Amount Per Serving

Calories 0

% Daily Value\*

Total Fat 0g 0%

Sodium 0mg 0%

Total Carbohydrates 0g 0%

Protein 0g 0%

\*Percent Daily Values are based on a diet of other people's secret recipes.



GO TEXAN.

Captured and Bottled at Tank Town  
2770 Highway 290 West, Dripping Springs, Texas 78620  
[www.rainwater.org](http://www.rainwater.org) or [www.rainwatercollection.com](http://www.rainwatercollection.com)

# H<sub>2</sub>O'C ENGINEERING



## ***Private Label Bottled Water*** **your organization's name and logo**



**34 cents per bottle when ordering pallet quantities!**

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# Missouri Rural Water

**"No Protein!"**

This bottle can be refilled  
with your local tap water  
nearly 640 times for less  
than a dollar.

062711



MISSOURI RURAL WATER  
ASSOCIATION

"Your Resource for Water Quality"  
(573) 657-5533 [www.moruralwater.org](http://www.moruralwater.org)

**PURIFIED DRINKING WATER**  
**20 FL. OZ. (592 mL)**

## Nutrition Facts

Serving Size 8 fl. oz (240 mL)  
Servings Per Container: 2.5

Amount Per Serving

Calories 0

% Daily Value\*

Total Fat 0g 0%

Sodium 0mg 0%

Total Carbohydrate 0g 0%

Protein 0g 0%

\* Percent Daily Values are based on a  
2,000 calorie diet.

Crystal Clear Water  
Purified by Triple Filtration,  
Reverse Osmosis, Ozonated.

Distributed by:  
MRWA  
Ashland, MO 65010



Please  
Recycle

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**Local Brands:** for truckers and college women

## Grain Valley Truck Stop

816-443-2027



**Caution:**  
**This is not**  
**beer!**

**Conoco**

**GV**

**SUBWAY**

SODIUM FREE

### Nutrition Facts

Serving Size 8 fl oz (240ml)  
Servings Per Bottle 2.1

Amount Per Serving

Calories 0

% Daily Value

Total Fat 0g 0%

Sodium 0mg\* 0%

Total Carbohydrate 0g 0%

Protein 0g 0%

\*Percent Daily Values are based on a 2,000 calorie diet.

Bottled by

THE WATER DEPOT Inc.  
1150 W. 151st St - Suite B  
Olathe, KS 66061

www.thewaterdepot.com  
913-782-7277

PURIFIED WATER 20oz. (591 ml)

PURIFIED BY REVERSE OSMOSIS

please recycle OZONATION

www.stephens.edu

**Won't make you fat!**

**STEPHENS**  
**COLLEGE**

Bottled by Crystal Springs, Inc.  
El Reno, OK 73036  
Consumer Inquiries Please Call 405-262-0237

www.crystalspringsok.com

.5 LITER (16.9 FL. OZ.)

Pure Drinking Water

### Nutrition Facts

Serving Size 8 Fl. Oz. (200mL)  
Servings Per Bottle 2

Amount Per Serving

Calories 0

Total Fat 0g 0%

Sodium 0mg 0%

Total Carbohydrate 0g 0%

Protein 0g

\*Percent Daily Values are based on a 2000 calorie diet.



100% RECYCLABLE

Water source approved by the State  
of Oklahoma Department of Public  
Health Permit Number 0049051

BOTTLED IN THE U.S.A.



# Regulation of Bottled Water Quality

## Proposed (2007) California *Water Quality Notice*:

**Make available annual** *consumer confidence report*

**Label to indicate source; provide** *contact information*

## International Bottled Water Association (IBWA):

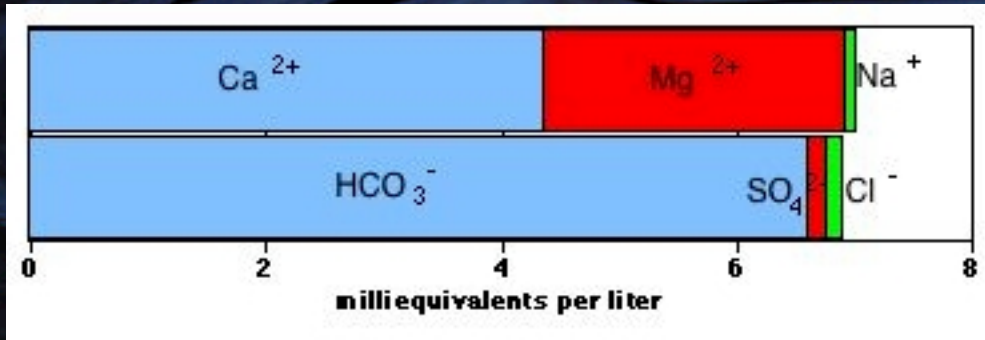
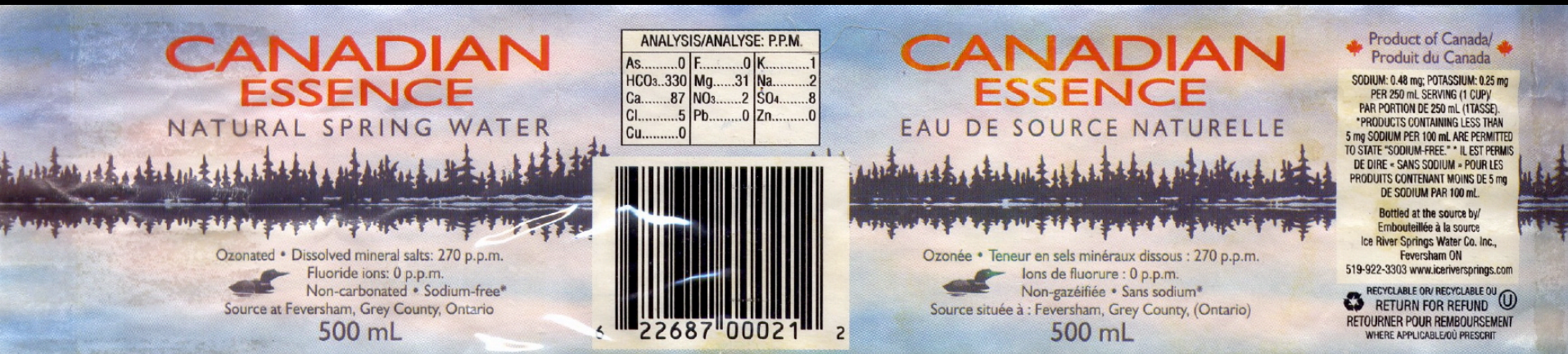
**Opposed to onerous California legislation**

*Pepsi* spokesman said anyone can find out the true source of *Aquafina* by calling the 800 number on the bottle top.



# Produit du Canada

**Cold water tastes good! It's cold in Canada!**  
**Canadian water tastes good!**



**The Canucks actually provided  
 water quality data on their label**

**-- in two languages. Olé!**

**No lake here! The data indicate  
 a moderately hard groundwater.**

**H2O  
 ENGINEERING**



**1994 - Pepsi Water hits the Spot!**  
**Twelve full ounces, that's a lot!**

Pepsi tests *Aquafina* in Wichita, Kansas.

By 2003, Aquafina has become the top selling brand in the U.S.

As of 2007, Pepsi acknowledges that the water comes from  
*'public sources'*.







# Coca-Cola Co-opts AWWA

The Coca-Cola Company  
2007 Water For People Golf Event  
Presented by RE/MAX International, Inc.

“Did you know **The Coca-Cola Company** offers more than 400 brands in over 200 countries?

“Well, we do!

There are 193  
recognized countries  
in the world!

“From **Inca Kola**, a soft drink found in North and South America, and **Samurai**, an energy drink available in Asia; to **Vita**, an African juice drink, and **BonAqua**, a water found on 4 continents, our product variety spans the globe!”

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# 1999 - Coca-Cola discovers water sales potential goes beyond worldwide with marketing

Coca-Cola introduces *Dasani* which becomes second largest selling brand in the U.S.

While Dasani bombs as '*bottled punk*' in Great Britain, Coca-Cola currently boasts sales of 400 varieties of bottled water in 200 countries worldwide.



# The Coca-Cola Company

The Coca-Cola Company Virtual Vender

**Brand Name:** BonAqua/BonAqa

**Drink Type:** Water

**BonAqua/BonAqa:** BonAqua provides the pure taste of crystal water. Known as BonAqa in some locations, this refreshing product is available carbonated or noncarbonated, depending on location.

**Available in the following flavors:** Apple, Apple Mint, Cranberry Grapefruit, Guaraná, Lemon, Lemon Lime, Lime, Lingonberry, Lychee, Orange, Pear, Raspberry, Strawberry, Tangerine and **Unflavored**

**Available in the following locations:** Australia, Azerbaijan, Belarus, Belgium, Brazil, Cape Verde, Comoros, Czech Republic, Democratic Republic of Congo, Ecuador, Estonia, Finland, Germany, Ghana, Guinea-Bissau, Hong Kong, Hungary, Iceland, Italy, Japan, Kazakhstan, Kyrgyzstan, Latvia, Lesotho, Liberia, Lithuania, Macau (Macao), Macedonia, Mauritania, Mayotte, Moldova, Mongolia, Morocco, Namibia, Netherlands, Norway, Peru, Poland, Russia, Slovakia, South Africa, Spain, Sweden, Taiwan, Tunisia, Turkmenistan, Ukraine, Uruguay and Uzbekistan.

‘Unflavored’ is a flavor?

H<sub>2</sub>O'C  
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# The Coca-Cola Company

The Coca-Cola Company Virtual Vender

**Brand Name:** DASANI Flavors

**Drink Type:** Water

**DASANI Flavors:** DASANI Grape, DASANI Lemon, DASANI Raspberry and DASANI Strawberry flavored water beverages are naturally flavored and lightly sweetened with sucralose and acesulfame potassium (Ace K) to provide a water alternative without calories or carbohydrates.

**Available in the following flavors:** Grape, Lemon, Raspberry and Strawberry.

**Available in the following location:** United States.

In Missouri, the most popular bottled water flavors are:

*Busch, Budweiser & Michelob.*

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**Dasani** was launched in the UK in January 2004

It was referred to as *bottled spunk* and featured the tagline *can't live without spunk*. In the UK, *spunk* is a euphemism for semen.



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# Dasani was pulled from the UK market in March 2004

In March 2004, a news article revealed that the tap water of the Town of *Sidcup* in Kent was being treated, bottled and sold under the **Dasani** brand name in the UK.

Two weeks later, UK authorities found a concentration of *bromate* in the product. Coca-Cola recalled half a million bottles and pulled the **Dasani** brand from the UK market.

Ironically, the *bromate* was induced by *ozonation* of the tap water's *bromide ion*.



# Soon! - with Steroids!

*The Coca-Cola Company*

The Coca-Cola Company Virtual Vender

**Brand Name:** DASANI Plus

**Drink Type:** Water

**DASANI Plus:** DASANI Plus vitamin-enhanced flavored water beverages have zero calories per serving and come in three varieties:

- 1) **Refresh + Revive:** Kiwi Strawberry Flavor has 10% of the reference daily intake (RDI) per serving of Vitamins B3, B6 and B12.
- 2) **Cleanse + Restore:** Pomegranate Blackberry Flavor contains 10% of the RDI per serving of Vitamins E, B3, B6 and B12, plus 1 gram of fiber.
- 3) **Defend + Protect:** Orange Tangerine Flavor provides 10% of the RDI per serving of Vitamin E and Zinc.

**Available in the following location:** United States.

Only in America!

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# China Water

*The Coca-Cola Company*

The Coca-Cola Company Virtual Vender

**Brand Name:** Ice Dew

**Drink Type:** Water

**Ice Dew:** Ice Dew is a bottled water available in China.

**Available in the following flavor:** Unflavored.

**Available in the following location:** China.

Reducing the U.S. - China  
flavor imbalance ...

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# Targeting Water Drinkers



## **Kidz Water!**

-- not just for yuppies  
and old fartz  
anymore!

*It's fluoridated!*

**H<sub>2</sub>O'C**  
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# For Sports Drinkers on the Run!

Glacier  
Brew

A million  
years in the  
making!

Springfield, MO  
City Utilities  
Tap Water

Infilco  
Degremont

Discover  
Dothan,  
Alabama





## 2007 - Increase in PET production facilities underway

Chemical producers initiate new PET plant construction and undertake existing facility upgrades to meet projected needs.

By 2008, North American PET production capacity was projected to increase by nearly 1.8 million metric tons per year.

# Emergency Drinking Water Supply



**Missouri:**

**West Plains**

Floods

**Cabool**

Terrorist Attacks

**Gideon**

Mushroom Clouds  
on Main Street

**H<sub>2</sub>O'C**  
ENGINEERING



# Potables of the CCCP



Alkalinity 2100 mg/l

Sulfate 800 mg/l

Chloride 250 mg/l

Calcium 700 mg/l

Magnesium 200 mg/l

Sodium 350 mg/l

Alkalinity 5000 mg/l

Chloride 500 mg/l

Sodium 2100 mg/l



服务热线: 0571-87208073  
生产日期(批号): 见瓶身(盖)  
产品标准号: GB17323  
保质期: 12个月  
开瓶后请尽快饮用 冷藏后风味更佳

生产许可证编号: Q53301 0861 2222

6 902083 881405

[illegible]

通过 ISO14001 环境管理体系认证  
通过 ISO9001 质量管理体系认证

崂山矿泉水取自风景秀丽的崂山山麓，其地下矿泉水均经裂隙、过滤层，属天然合剂矿物质天然矿泉水。富含对人体有益的矿物质及微量元素。

Laoshan natural mineral water is drawn from springs in the granite of Laoshan with several meters deep under the earth. It is Br-Sr-Cl compound, good-quality, pure natural mineral water, rich in mineral substances and trace elements which is of great benefit to health.

崂山矿泉水系在水源地灌装

6 922307 203301

# Laoshan

精品



®

## 崂山矿泉水

净含量: 330ml

水质主要成份(毫克/升)

钙 Sr	0.25-0.60	偏硅酸 HSiO <sub>3</sub>	30.0-40.0
镁 Mg	0.5-2.5	氯化物 Cl	10.0-20.0
钠 Na	6.5-17.8	硫酸盐 SO <sub>4</sub>	9.5-23.5
铁 Fe	0.0-0.8	重碳酸盐	60-120
锰 Mn	0.0-0.350	溶解性固形物	140-280
总硬度	2-10	总溶解性固体	60-120

天然二氧化硅 析出

青岛崂山矿泉水有限公司

国家指定型号

国家卫生标准 GB2000 960303

执行标准: GB8537

生产许可证: QS702 0801 0349

生产日期: 见瓶底 保质期: 24个月

配发方式: 玻璃瓶/罐装

总 公 司: 青岛崂山矿泉水有限公司

分 公 司: 青岛崂山矿泉水有限公司

销售热线: 青岛市东镇南岭15号

电 话: (0532) 3396425

南村特有人为青岛崂山矿泉水有限公司

Laoshan  
精品  
崂山®  
崂山矿泉水  
净含量: 330ml

SALT SODA WATER
SALT SODA WATER



延中

600ml

净含量: 600毫升

喜欢  
一  
如  
既  
往



延中

600ml

NET: 600mL

营养成分表	每100毫升含有 Nutrition Facts 100ml contains
碳水化合物 Carbohydrate	2.5g
蛋白质 Protein	0
脂肪 Fat	0
钠 Na+	98mg
能量 Energy	44kJ



中国名牌



质量认证

600ml延中盐汽水

由 www.600ml 商标授权

由延中饮料有限公司正式授权出品

其中网址: www.yanzhong.cn

配料: 纯净水、白砂糖、食用盐

食品添加剂: 无、含有防腐剂、无防腐剂

产品标准号: GB8534

食品生产许可证号: QS312 0001 2636

上海延中企业发展有限公司总经理

地址: 上海梧州路83号

地址: 上海吴淞路489号

电话: 021-9626363

委托销售地址: 上海龙阳路150号(伊

产生)通商国际英文书本中心

日期: 见瓶身 保质期: 12个月















农夫山泉 感谢您

服务热线: 800-857-1098

农夫山泉

# NONGFU SPRING






中国国家标准  
GB 8537-2003

**农夫山泉® 饮用天然水**

净含量: 550ml

**饮用天然水特性指标**

总硬度 (mg/L)	≤400
钙	≥20
镁	≥10
钾	≥35
钠	≤10
偏硅酸	≥180
pH值 (25℃)	7.1±0.5

千岛湖, 中国国家森林公园, 饮用天然水一级保护区, 水流量达579万立方米, 农夫山泉源自千岛湖水系70米深潭, 年平均水温12℃左右, 天然清冽, 味道甘冽, 农夫山泉源地水质, 含钙、镁、钾、偏硅酸等天然矿物质, 有益人体健康。

保质期: 24个月 生产日期: 见瓶体产品标准号: DB33383

水源产地: 深潭取水

水源地地址: 浙江省杭州市新安江金溪

农夫山泉股份有限公司

地址: 浙江省德清市新安江黄金滩

免费电话: 800-857-1098 (浙江地区)



**中国航天员  
专用饮用水**





6 921168 5097

一喝水, 一分甜, 每喝1500个水源地的好日子

农夫山泉天然水, 源自千岛湖, 经国家权威机构检测, 符合国家《饮用天然水卫生标准》(GB 8537-2003) 的要求, 不含任何有害物质, 是天然、健康、安全的饮用水。



## Here's Nestlé!

**CAMELLIA MOUNTAIN**

**H<sub>2</sub>O ENGINEERING**

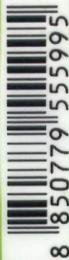


# ข้อมูลโภชนาการ

พลังงานต่อหน่วยปริมาตร : 1 กิโล (200 มล.)  
จำนวนหน่วยบริโภค : 2.5  
คุณค่าทางโภชนาการต่อหน่วยบริโภค  
พลังงานต่อหน่วยบริโภค 0 กิโลแคลอรี

	% ปริมาณ ต่อหน่วยบริโภค
โซเดียมทั้งหมด	0 ก. 0 %
ไขมัน	0 ก. 0 %
คาร์โบไฮเดรตทั้งหมด	0 ก. 0 %
น้ำตาล	0 ก. 0 %
โปรตีน	0 มก. 0 %

\* ข้อมูลโภชนาการนี้คำนวณจากข้อมูลที่ได้รับจากบริษัท (Thai PD) ซึ่งอาจมีความ  
คลาดเคลื่อนเล็กน้อย: 2,000 กิโลแคลอรี



**aura**  
Natural Mineral Water

Net content 0.5 Litre

# น้ำแร่ธรรมชาติแม่ริม คราออร่า

เป็นน้ำแร่ที่มาจากแหล่งน้ำธรรมชาติใต้พิภพทางตอนใต้ของประเทศไทย  
Aura® natural mineral water naturally springs up  
from its source in Northern Thailand.

ชนิดของแร่ธาตุที่สำคัญ	MINERAL CONTENT
ไบคาร์บอเนต	แคลเซียม Bicarbonate Calcium
คลอไรด์	ฟลูออไรด์ Chloride Fluoride
แมกนีเซียม	ไนเตรท Magnesium Nitrate
ซัลเฟต	Sulphate

เก็บไว้ในที่แห้งและเย็น หลีกเลี่ยงจากแสงแดด  
KEEP IN A COOL DRY PLACE AWAY FROM DIRECT SUNLIGHT  
ผลิต และ บรรจุ ณ แหล่งกำเนิด คือ บริษัท ออโรมินิอัม จำกัด (มหาชน)  
วันที่ 205/1 หมู่ 2 ตำบลโอง่าง อำเภอมะปริง จังหวัดเชียงใหม่  
สำนักงานขาย โทร. (02) 714-0444,  
(02) 909-0599

50-2-00138-2-0001

**ออรา**  
น้ำแร่ธรรมชาติแม่ริม



ปริมาณสุทธิ 0.5 ลิตร



**LA VIE**  
HÀM LƯỢNG KHOÁNG NHẸ (mg/l)  
Tổng chất rắn hòa tan (TDS) 155

HCO <sub>3</sub> <sup>-</sup>	110	NITRAT	< 1.00
NATRI	21	FLO	0.17
CAN-XI	12	IOT	< 0.01
MAGIÊ	11	SẮT	< 0.01
KALI	4	pH	6.4

ตั้ง chai tại nguồn như quyền  
Bởi Công ty Liên doanh La Vie  
QUỐC LỘ 5 - NHỰA QUỲNH - VĂN LÂM - HUNG YÊN



NƯỚC KHOÁNG THIÊN NHIÊN

**La Vie**  
1,5L



La Vie, nước khoáng thiên nhiên nhẹ và tinh khiết,  
được lấy lên từ nguồn nước khoáng sâu  
được bảo vệ trong lòng đất, rất tốt cho sức khỏe  
của gia đình bạn nhờ có lượng khoáng chất cân bằng.

Để đảm bảo chất lượng tuyệt đối,  
La Vie được đóng chai trực tiếp tại nguồn dưới sự giám sát  
chất lượng của Nestlé Waters, công ty hàng đầu thế giới  
trong lĩnh vực nước đóng chai.

La Vie is bottled directly at source under the quality  
supervision of Nestlé Waters.

Best before, see date on the bottle.

Sử dụng trước hạn ghi trên chai

[www.laviewater.com](http://www.laviewater.com)

# SIAM DRINKING WATER

MANUFACTURED BY  
TTC SIAM DRINKING WATER CO.,LTD.  
(OFFICE) 2297 PATTANAKARN RD., SUAN-LUANG  
BANGKOK 10250 TEL. 322-8565 EXT 183, 188  
(FACTORY) 77 MOO 3 ROYAL FOLK ART &  
CRAFT CENTER RD., CHIENGRAKNOI  
SAMKHOE, PHATUMTHANI TEL. 979-8560-1

SIAM DRINKING WATER: THE FINEST  
PURIFIED HYGIENIC DRINKING WATER;  
USING THE FINE PROCESS OF  
FILTRATION, REVERSE OSMOSIS,  
ULTRAVIOLET LIGHT AND OZONATION.

NET CONTENT 599 ml.



นศก.257-2521

**น้ำดื่มตรา  
สยาม**

13-2-00441-2-0001

# น้ำดื่มตราสยาม

ผลิตโดย บริษัท ทีทีซี น้ำดื่มสยาม จำกัด  
(สำนักงาน) 2297 ถนนพหลโยธิน แขวงสวนหลวง  
เขตวัฒนา กรุงเทพฯ 10250 โทร. 322-8565 ต่อ 183, 188  
(โรงงาน) 77 หมู่ 3 อ.ชุมชนศิรินาครินทร์  
ต.เขื่อนลำนครา อ.สามโคก จ.ปทุมธานี โทร. 979-8560-1

น้ำดื่มตรา สยาม ไส้  
ผ่าน 4 ขั้นตอนการผลิต  
โดยผ่านกระบวนการฟิสิกส์  
และรีเวอร์ส ออสโมซิส ผ่านการฆ่าเชื้อ  
ด้วยแสงอัลตราไวโอเลตและระบบโอโซน

ปริมาณสุทธิ 599 มล.



**SIAM**  
DRINKING WATER



# Thailand

**THE CHEDI**  
PHUKET

**DRINKING WATER**  
PROVIDED COMPLIMENTARY

**น้ำดื่มตรา “ซีออร์ส”**  
ผ่านกรรมวิธี รีเวอร์สออสโมซิส  
จุดดริวไวโอเลต และโอโซน

ผลิตโดย :  
บริษัท ภูเก็ต อาร์.โอ. วอเตอร์ซิสเต็ม จำกัด  
18/16 ม.8 ต.ฉลอง อ.เมือง จ.ภูเก็ต  
โทรศัพท์ : 076-282075

ปริมาณสุทธิ 500 ซม.

 83-2-00341-2-0001

**THE CHEDI**  
PHUKET

**DRINKING WATER**  
PROVIDED COMPLIMENTARY

PURIFIED BY REVERSE  
OSMOSIS ULTRAVIOLETED  
AND OZONATED

PRODUCED BY :  
PHUKET R.O. WATER SYSTEM CO.,LTD.  
18/16 MOO 8 CHALONG SUBDISTRICT,  
MUANG DISTRICT, PHUKET  
Tel: 076-282075

Net Content 500 CC

## Ultravioleted?

**H<sub>2</sub>O'C**  
ENGINEERING



# Vietnam

NSF

## คริสตัล

น้ำดื่มคริสตัล น้ำดื่มรายเดียว  
ในประเทศไทย ที่ได้รับมาตรฐาน  
การผลิตน้ำดื่มของสหรัฐอเมริกา  
โดยสถาบัน NSF International

คิดจะดื่มน้ำ...ดื่มคริสตัล

## CRYSTAL

น้ำดื่ม  
ตราคริสตัล

ผลิตโดย

บริษัท เสรินสุข จำกัด (มหาชน)

63 ถนนพหลโยธิน-ปากเกร็ด

อ.เมือง จ.ปทุมธานี

ปริมาณสุทธิ 600 มิลลิลิตร

☎ 13-1-10824-2-0001

ศูนย์บริการผู้บริโภค โทร. 0-2692-3333

ควรเก็บในที่เย็น ปราศจากกลิ่น  
และหลีกเลี่ยงจากแสงแดด



Natural Mineral Water

# Minéré

Pho Sam



Ion Source

Best before : See side of bottle

Net Vol. 0.5 L

น้ำแร่ธรรมชาติจากแหล่งโพธิ์สามต้น  
ตรามินเอร์

Mineral Content :

Calcium	แคลเซียม
Magnesium	แมกนีเซียม
Potassium	โพแทสเซียม
Sodium	โซเดียม
Zinc	สังกะสี
Fluoride	ฟลูออไรด์
Bicarbonate	ไบคาร์บอเนต
Sulfate	ซัลเฟต

ผลิตโดย

บริษัท เบลวี่ วิเทล (ประเทศไทย) จำกัด

เลขที่ 41/1 หมู่ 5 ต.โพธิ์สามต้น

อ.บางปะหัน จ.พระนครศรีอยุธยา



☎ 14-2-00336-2-0001

ควมบริโภคบนวันที่ระบุข้างขวด

น้ำแร่ธรรมชาติ ตรา

# มินเอร์

คุณค่าแร่ธาตุ



จากธรรมชาติ

ปริมาณสุทธิ 0.5 ลิตร

Naturally Better For You ... Everyday

Minéré mineral water is 100% natural and refreshing.  
Minéré contains valuable minerals your body needs everyday.

คุณค่าจากธรรมชาติที่คุณดื่มได้

มีแร่ น้ำ 100% จากธรรมชาติ คุณดื่มแล้วสดชื่นจากแร่ธาตุต่าง ๆ  
ได้รับการบรรจุขวด ณ แหล่งกำเนิดจากธรรมชาติ

ควรเก็บในที่เย็น ปราศจากกลิ่น  
และหลีกเลี่ยงจากแสงแดด



ศูนย์ผู้บริโภคแห่งชาติ  
1-800-295588

Reg. Trademark of Société  
des Produits Nestlé S.A.



NƯỚC KHOÁNG THIÊN NHIÊN

NƯỚC KHOÁNG THIÊN NHIÊN

Phân tích, kiểm nghiệm tại trung tâm

FaT - Milano - ITALY (mg/l)

Tổng muối khoáng hòa tan (TDS): 499mg/l

CALCIUM	3.8	IRON	0.06
MAGNESIUM	1.35	SULPHATES	0.2
POTASSIUM	3.95	FLUORIDES	0.15
NITRATES	2.0	BICARBONATES	250
SODIUM	176	SILICA	23
IODES	0.4	CHLORIDES	90
		PH	7.8

CBCL : TC 01/2002/TC05-BM

Phiếu tiếp nhận CBCL số : 2116/2002/CB0-VI

Hạn sử dụng in trên nhãn chai



ASEM5  
HANOI 2004

VIET NAM - ITALIA

Đóng chai trực tiếp tại nguồn khoáng

Đông Cơ - Tiên Hải - Thái Bình

Bởi Công ty S.X kinh doanh XNK Bình Minh

BITEXCO

NƯỚC UỐNG CHÍNH THỨC CỦA HỘI NGHỊ CẤP CAO ASEM 5

NATURAL MINERAL WATER

# Vital

500ml

# Vital

500ml



# Vietnam

French, German, &  
Swiss companies

often provide  
treatment of local  
water sources with:

filtration,

reverse osmosis,

carbon filtration,

ultraviolet

irradiation or

ozonation.

**NƯỚC UỐNG ĐÓNG CHAI**

**Hoa hồng**

**CỦ CHAI** THỂ TÍCH THỰC 500ML

Chỉ tiêu chất lượng mg/l:  
pH: 6.5 - 8.5 Cl: 0 - 200  
Mn: < 0.05 Fe: < 0.05  
F: < 0.05 Cu: < 0.05

SẢN PHẨM CỦA NHÀ MÁY TÍCH LŨY BƠ  
ĐÁ BÀO CÚ CHÈ:  
PHỐ HÉP, PHƯỜNG MỸ HƯNG, CÚ CHÈ,  
TP. HỒ CHÍ MINH  
TEL: 7948 650-7948 760

Áp dụng theo TCVN 6056-2004  
S6 CBCL: 01/2009/CBTC-KĐT

BẢO QUẢN NƠI KHÔ, BẢO - THOÁNG MÁT

**BOTTLED DRINKING WATER**

**Hoa hồng**

**CỦ CHAI** THỂ TÍCH THỰC 500ML

Nước uống đóng chai HOA HỒNG được sản xuất từ nguồn nước ngầm qua hệ thống thiết bị hiện đại theo công nghệ Mỹ. Được xử lý qua hệ thống thẩm thấu ngược RO và diệt trùng bằng tia cực tím UV.

NSX - HSD xin xem trên chai

**NƯỚC KHOÁNG THIÊN NHIÊN**

**LaVie**

**NATURAL MINERAL WATER**

**LaVie**

500ml

Bạn nên biết **LaVie**

NHÀM LƯỢNG KHOÁNG THẤP (mg/l)  
Tổng chất rắn hòa tan (TDS) 200

MG/L	500	KAJ	8
Na+Cl	10	Ca	4.5
Ca+Mg	16	SO4	4.5
Na+Cl	8		

Bạn có thể gọi

Nhà phân tích nước (tên gọi của phòng thí nghiệm phân tích nước)  
Số điện thoại: 0908 000 000  
Địa chỉ: 10/10 Đường Nguyễn Văn Linh, Quận 1, TP. HCM

ĐỒNG CHAI TÁI CHẾ KHUẤT NƯỚC  
HỖ CHỤT TỰ ĐỘNG KHUẤT NƯỚC  
QUỐC LỘ 1 - KHÁNH HẢI - TÂN AN - LONG AN

Áp dụng theo TCVN 6056-2004  
S6 CBCL: 01/2009/CBTC-KĐT

**600ml** **THÊM 20 % GIÁ KHÔNG ĐỔI** **THÊM LƯỢNG NƯỚC TĨNH KHIẾT & AN TOÀN**

**BOTTLED DRINKING WATER**

**NƯỚC UỐNG ĐÓNG CHAI**

**joy**

**BOTTLED DRINKING WATER**

**joy**

500ml

Chất lượng nước tinh khiết và an toàn  
Được sản xuất từ nguồn nước ngầm qua hệ thống thiết bị hiện đại theo công nghệ Mỹ. Được xử lý qua hệ thống thẩm thấu ngược RO và diệt trùng bằng tia cực tím UV.

NSX - HSD xin xem trên chai

**NƯỚC UỐNG ĐÓNG CHAI**

**Quarter**

**BOTTLED DRINKING WATER**

**Quarter**

500ml

Sản xuất tại:  
Nhà Máy Nước Giải Khát THẠCH BÍCH  
02 Nguyễn Chí Thanh - TP. Quảng Ngãi  
Tỉnh Quảng Ngãi - Việt Nam  
ĐT: (035) 822009 - FAX: 810377

Chỉ tiêu chất lượng mg/l:  
pH: 6.5 - 8.5 Cl: 0 - 200  
Mn: < 0.05 Fe: < 0.05  
F: < 0.05 Cu: < 0.05

SẢN PHẨM CỦA NHÀ MÁY TÍCH LŨY BƠ ĐÁ BÀO CÚ CHÈ:  
PHỐ HÉP, PHƯỜNG MỸ HƯNG, CÚ CHÈ, TP. HỒ CHÍ MINH  
TEL: 7948 650-7948 760

Áp dụng theo TCVN 6056-2004  
S6 CBCL: 01/2009/CBTC-KĐT

**as'agiri**

**Nước Uống Đóng Chai**

**BOTTLED DRINKING WATER**

**as'agiri**

朝霧

本製品は日本の会社により製造されています

Chỉ tiêu chất lượng mg/l:  
pH: 6.5-8.5  
Fe: < 0.5  
SO4: < 250  
Cl: < 1  
Ca: < 250  
Na: < 200  
Mn: < 0.5

Sản xuất từ nguồn nước thủy cục qua hệ thống tinh lọc RO và diệt trùng bằng Ozon, tia cực tím.

NSX, HSD: xem trên chai.

Áp dụng theo TCVN 6056-2004  
S6 CBCL: 01/2009/CBTC-KĐT

**as'agiri** là nhãn hiệu nước uống tinh khiết đóng chai được sản xuất từ công ty Nhật Bản, rất thích hợp cho nhu cầu giải khát và nấu nướng.

**as'agiri** is a new brand of purified drinking water produced by Japanese company. It is suitable to use for cooking and all drinking purposes.

Sản phẩm của CTY TNHH ALPHA VIỆT NAM  
204 No Trang Long  
Q. Bình Thạnh, TP. HCM, Việt Nam  
ĐT: (848)-8432474

SCBCL: 10334/2004/CBTC - YT

Thể tích thực 1.5L



# In Vietnam,

## Coca Cola brings you Joy!

CHÚC MỪNG NĂM MỚI TÂN XUÂN VAN PHÚC TÀI LỘC TIỀN

"Joy" sản xuất từ nguồn nước ngầm và được thanh trùng bằng ozone. "Joy" một sản phẩm chất lượng của công ty "Coca-Cola". Sản xuất bởi công ty TNHH nước giải khát "Coca-Cola", Việt Nam, Km 17, xa lộ Hà Nội, phường Linh Trung, quận Thủ Đức, Tp. HCM, theo sự cho phép của công ty "Coca-Cola", chủ sở hữu thương hiệu "Joy", thiết kế "Joy", "Coca-Cola" và chai hình Contour. ©2002 The Coca-Cola Company. Hạn sử dụng: xem trên chai.

1.5l

**Xuân 2006**  
BÌNH TUẤT

**joy**™

**NƯỚC UỐNG ĐÔNG CHAI**  
Không chỉ nước được tinh lọc, mà mỗi chai và nắp chai cũng được thanh trùng sạch sẽ.

*a quality product of The Coca-Cola Company*

**Xuân 2006**  
BÌNH TUẤT

**joy**™

*a quality product of The Coca-Cola Company*

**H<sub>2</sub>O'C**  
ENGINEERING



# Wales - Green Valley

TWYNI

## Green Valley



We all know that water is vital to our wellbeing. But did you know that your recommended daily fluid intake is 8 glasses of water a day?



Green Valley® is a still spring water from the heart of the lush green countryside of Wales.



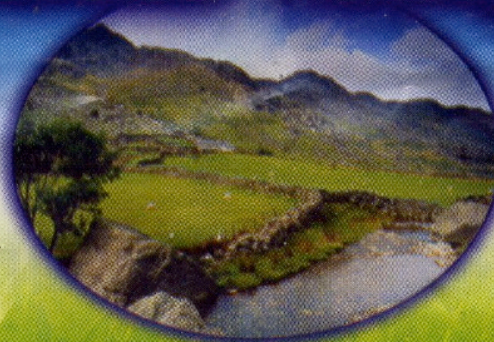
So drink Green Valley to help you stay in top form all day long!

*This bottle contains 100% of your recommended daily fluid intake.*

Best before: see bottle neck.

This bottle is intended for the exclusive use of Green Valley® spring water.

Keep cool and store in a clean dry place out of direct sunlight.



1.5 L

### Spring Water



Typical analysis per litre:  
calcium 31mg, sodium 10mg,  
magnesium 7mg, potassium 7mg,  
nitrates 3mg, chlorides 20mg,  
sulphates 5mg, silica 8mg.

Twyni Spring is sourced in Wales in the Brecon Beacons: H8 Ltd, Blaen Twyni, Pen-Y-Cae, Swansea, SA9 1GS.

**Store ... out of direct sunlight!**  
**or it might turn green?**



# India - Aqua-Fresh



*Enjoy*  
**Aqua-Fresh**

The guaranteed taste of purity

**R.O. + U.V. + Ozonised**

PACKAGED DRINKING WATER

IS 14543



CHL-7405488

**Indrayani foods Limited**

Reg. Off.: Datta Palace, Pune - Satara Road,  
Balaji Nagar, Pune - 411043.

Factory : Gat No. 475, Dhangarwadi,  
(Shirwal), Tal. Khandala, District Satara.

**H2O**  
**ENGINEERING**



**India - Bada Bisleri**

**20% EXTRA FREE**

**Bada  
Bisleri®**

**ONLY**

**Rs. 12**

1.2 L. AT THE PRICE

OF 1 L. BISLERI

**H<sub>2</sub>O'C**  
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# India - Bailey

Parle

**FREE**

200 ml

**Bailey**

AQUA

1.2 l at  
the price  
of 1 l  
Bailey

Refer Cap/ Neck for MRP of 1 l Bailey  
(Inclusive of all taxes)

Do they put 1.2 liters into a 1 liter bottle?  
Compressed water?

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# India - Himalaya

## Mount Everest Mineral Water

COMPOSITION mg/ltr.  
pH - 7.3 Dissolved Solids @190°C:300 p.p.m.

Calcium	62	Bicarbonate	263
Magnesium	15	Fluorides	0.2
Sodium	20	Chlorides	8
Potassium	4	Nitrates	4

DO NOT FREEZE, KEEP IN COOL PLACE  
**Contents - 1 litre e**  
Bottled at source by  
**MOUNT EVEREST MINERAL WATER LTD.**  
Dhaulakuan, Poanta Sahib, Distt. Sirmour  
Himachal Pradesh, INDIA.  
DO NOT ACCEPT IF CAPSEAL IS BROKEN  
Batch No. & MRP printed on bottle  
Certified by  
Institut Fresenius, Germany

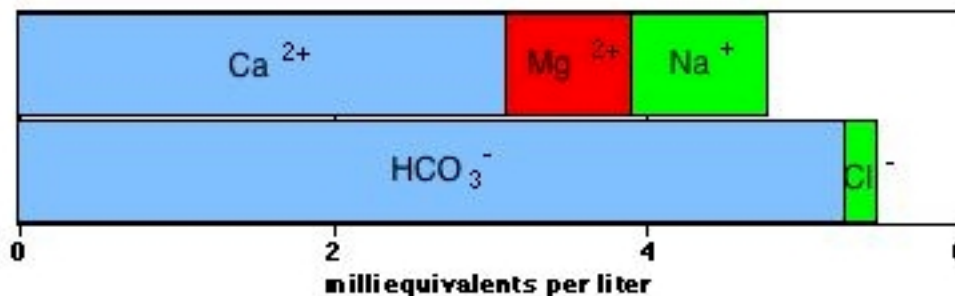
**1 L e**

**HIMALAYAN™**  
NATURAL MINERAL WATER

RECYCLABLE

IS : 13428  
CML-9273181

CRUSH AFTER USE



120°C  
ENGINEERING



# India - Oxyrich

Three times healthier?



Proudly Indian

Manikchand<sup>TM</sup>  
**Oxyrich**

HEALTHY DRINKING WATER

H<sub>2</sub>O'C  
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# India - Sujal

## I'm safe



Quantity : 1 Litre net.

M.R.P. (Incl. of all taxes): Rs.

1 2

Batch No.

94

Date of Packing

DEC 0 3

Best for consumption within  
Six months from date of packing

Process : Filtration, Reverse Osmosis,  
UV Sterilization, Micron Filtration & Ozonisation

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# India - Urja



PACKAGED DRINKING WATER

1 Litre

U. V. Treated

MANUFACTURED BY :

**Kutwal Foods Pvt. Ltd.**

Sai Nagar, Andhalgaon, Taluka : Shirur, Dist. Pune.

Ph.: 02137- 22312/13

Pune Ph. : 020-4376929, 4372554.

NET CONTENTS : 1 Litre

BATCH NO.:

17

MFD.:

MAXIMUM RETAIL PRICE

17 1003

INCLUSIVE OF ALL TAXES

12



PLEASE CRUSH  
THE BOTTLE  
AFTER USE



H<sub>2</sub>O'C  
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# Water Bottles: Landfill & Litter

2.4 million metric tons of PET (polyethylene terephthalate), derived from crude oil, are used for bottles annually.

In the U.S., 86% goes to landfill or becomes litter.

U.S. consumes

1.5 million barrels of oil annually in production of disposable water bottles.

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# **U.S. PET Production - a growing bubble?**

**North America's largest PET plant,  
430,000 metric tons annually  
due to start-up in 2008 in Decatur, Alabama**

***Mossi and Ghisolfi Group plan  
New 800,000 metric ton plant  
somewhere in U.S.***

**Plus 200,000 metric tons  
expansion in West Virginia and Mexico**

**Eastman Chemical opened a  
350,000 metric ton plant  
in South Carolina in 2007**

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# 2007 - Backlash: Economic, Environmental, and Ethical

To save taxpayer money and landfill space, City of San Francisco bans the use of municipal funds to purchase bottled water.

Los Angeles, Salt Lake City, Ann Arbor follow suit.







# **San Francisco** **No City Purchase** **of Bottled Water!**

(GETTY IMAGES)

City ban will help stem global warming, save taxpayer money  
Environmental impact of making, hauling, disposing of bottles  
Over a billion bottles end up in California's landfills each year

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# 2007 Chez Panisse

**Berkeley, California**

**stopped serving bottled water  
citing environmental impacts**

**The Bottled Water *BS Alarm*  
has also gone off in:**

**San Francisco**

**Seattle**

**Los Angeles**

**Minneapolis**

**Salt Lake City  
City**

**New York**

**Ann Arbor**

**Boston**

**St. Louis**

**Santa Barbara**

**Berkeley**

**San Leandro, ...**

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# City of St. Louis

**Starting this spring, City Hall will no longer buy bottled water for employees and plans to cancel the roughly \$20,000 it has in contracts with area vendors.**



**St. Louis sells water from the city's treatment plant to PepsiCo's north St. Louis facility, which filters and sells it as Aquafina for \$1.25 a bottle.**



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# City of St. Louis

Chosen as 2007's  
*"Best Tasting City Water in America"*  
by the U.S. Conference of Mayors



- Blind taste test
- 93 entries



O'C  
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Swiss Cost Evaluation: Economics of Tap vs. Bottled Mineral Water

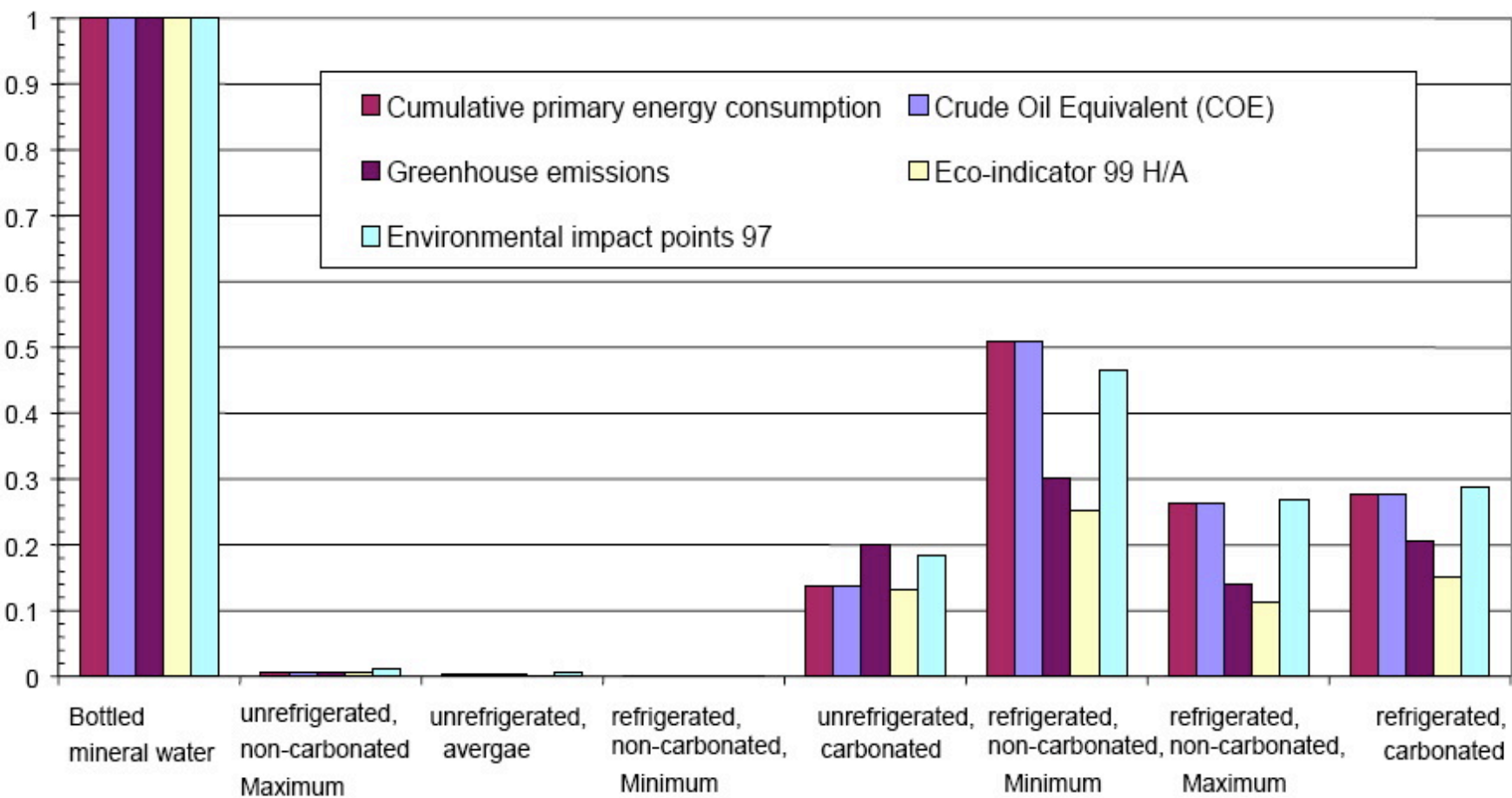


Fig. 4.2 Relative Comparison of the Environmental Impact of Bottled Mineral Water vs. Tap Water. The height of the bar indicates the environmental impact of the tap water variants as compared to the corresponding variant for bottled mineral water.



## 2007 - Bottled Water bubble burst creates tsunami of rhetoric

An International Bottled Water Association  
(IBWA) spokesman condemns  
*U.S. environmental activists*  
for unfairly criticizing bottled water sales.



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# IBWA Decries Bottled Water 'Activism'

*"During the past year, critics of bottled water have become more organized and active, instituting new methods and tactics to attack the industry."*

Corporate Accountability International (CAI)

*"...even acknowledges ... the support it had from a number of faith-based organizations ..."*

*"They are exploiting the current political climate that supports environmental issues to demonize the bottled water industry."*

*"... arm yourself with the facts at [www.bottledwater.org](http://www.bottledwater.org)"*

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# Arguments re: Bottled Water

## Aficionado

I can taste the difference!

I am sensitive!

It is better for you than soda pop!

You can recycle the plastic!

I want to protect my family's health!

It's convenient!

## Cynic

Ever tried a taste test?

Can you smell plastic?

So is tap water!

Americans don't recycle!

From what?

(Do you know what is in the bottled water?)

How hard is it to fill a bottle from the tap?

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## What's 'wrong' with bottled water?

**Bottled Water is Luxury** In the face of the needs of real people, suffering the real effects of water scarcity, luxury should not be our choice.

**Bottle Water is Wasteful** Most luxuries are, but bottled water has enormous costs that rival some of the biggest offenders.

**The Money Spent Can Be Used Better Elsewhere.** Waste not, and others will want less. Your resources can change someone's life!

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Skip the Bottle, Save a Life



# Fiji Water - 'distant and exotic'

Manufacture of a 1 kilogram bottle requires:

6.7 kilograms of water and

0.85 kilograms of fossil fuel

Shipment (8700 km) to U.S. results in:

0.56 kilogram of emissions

Retail Cost: \$1.50

After Evian, Fiji is #2 in  
premium bottled water

Untouched by man.  
Until you drink it.

Fiji Water comes from an aquifer deep within the earth on the remote islands of Fiji. Bottled at the source, natural artesian pressure forces the water through a hermetically sealed delivery system free of human contact. It is never exposed to the environment. At least, until you unscrew the cap.

[www.fijiwater.com](http://www.fijiwater.com)

Typical Analysis in mg/liter:

Silica	85	pH	7.5
Calcium	17	Bicarbonates	140
Magnesium	13	Total Dissolved Solids	210

Source: Yaqara, Viti Levu,  
Fiji Islands. Bottled by:  
Natural Waters of Viti Limited,  
1 Naseyani Rd, Yaqara, Fiji  
PRODUCT OF FIJI  
Please Recycle  
1.877.426.3454  
CA CRV ME 5c DEP NV7096 HI 5c  
CT#611 NYSHD Cert 1-115



500 mL (1.05 PT)

# Lighterfootstep.com

## five reasons not to drink bottled water

- Bottled water isn't a good value
- It is no healthier than tap water
- Bottled water creates trash, litter, landfill
- Bottled water means less attention to public systems
- Leads to the corporatization of water



# Recycle your PET?

Coca-Cola reacts to critics

will build world's largest PET recycling plant

100 million lbs/year - Spartanburg, N.C.

Goal

45,000  
metric tons

Coke claims markets in  
200 countries

to recycle 100% of its U.S. PET bottles

How? --- by establishing

recycling centers throughout the U.S.

promoting *curbside collection* of PET

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# International Bottled Water Association

Bottled water consumers' fears:

- aging municipal distribution systems and longer-term quality of municipal water,
- health issues related to the use of chlorine and chloramine,
- taste of chlorine,
- fear of contamination from chemical spills, organic substances, or sabotage,
- health concerns about consumption of soft drinks.



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# International Bottled Water Association

IBWA is now

Pro-choice: bottled water is about beverage choice

Environmental: recycling must focus on all packaging



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# International Bottled Water Association

IBWA:

is launching a comprehensive ad campaign to respond to the growing threat from activist groups

members are urged to stay alert to critics, misinformation

develop solid relationships with community leaders and elected officials

counter the misinformation that activists may offer

[www.bottledwater.org](http://www.bottledwater.org)

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# 2008 - IBWA Turns 'Green'

## Nestle

will use 30% lighter plastic bottles  
will use 30% smaller labels; *Eco-Shaped* bottled  
bottles will be 100% recyclable and more compactable  
is building plants that are *green-building certified*  
will use trucks that are well-maintained, more efficient  
is looking at hybrid forms of transportation

## IBWA

joined the *National Recycling Partnership*  
will lobby govt. officials to get *efficient* recycling programs  
took full-page ads: NY Times, SF Chronicle

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# 2008 - IBWA Turns 'Green'

IBWA favors beverage choice

will promote recycling advocacy and education

Bottled water 'taxes' (deposits) targeting the bottled water industry are 'missing broad opportunities to put in place sustainable, long-term protective policies that do not discourage the choice of healthy bottled water.'

'We don't market to disparage or undermine consumer confidence in tap water. Ours is a beverage choice, not a tap water replacement'

'It's not like people will switch from bottled water to tap water. They'll choose another beverage, or they'll put something in a cup that's discarded in the waste stream.' (V.P. Communications, IBWA)

IBWA  
ENGINEERING



# U.S. Plastics Recycling Rates Decline

“Plastics don't actually *recycle*. Instead, they are reprocessed into secondary (usually non-recyclable) products due to their structural/chemical sensitivity, the extremely low cost of virgin plastics, poor product design and materials policy.” (International Plastics Task Force).

Despite curbside recycling, the PET recycle rate dropped to 11-year low of 22% in 2001. With the discard of contaminated material, the PET *utilization* rate was 18%.

# Recycling Recognized as Significant Cost for Municipalities

“The city's recycling program will be drastically scaled back starting today, as the Bloomberg administration, in a money-saving move, halts the recycling of glass and plastics.” (New York Times, July 1, 2002).

It takes about 3-5 times the number of personnel to recycle as to landfill.



# 2008 - IBWA Turns 'Green'

Public Water Supplies subject to USEPA regulations:  
83 Maximum Contaminant Level (MCL) parameters

Bottled water (Food Product) regulated by  
Food and Drug Administration (FDA)

FDA sets Standards of Quality (SOQ) for food products

Operationally, bottlers may test for:  
*coliform bacteria, ozone residual, conductivity, pH, fluoride*



# **U. S. Conference of Mayors - 2008**

## **considers resolution on purchase of bottled water**

### **SUPPORTING MUNICIPAL WATER SYSTEMS**

WHEREAS, the United States' municipal water systems are among the finest in the world; and

WHEREAS, high quality, safe drinking water is already available at most public locations; and

WHEREAS, mayors are responsible for delivering safe and affordable water to our citizens; and

WHEREAS, bottled water is regulated by the FDA and municipal tap water is regulated by the EPA and has more stringent requirements for testing; and ...





# U. S. Conference of Mayors - 2008

WHEREAS, local governments invest approximately \$82 billion a year to provide water and sewer services; and

WHEREAS, bottled water often costs more than an equivalent volume of gasoline, equivalent to 1,000 to 10,000 times more than tap water; and

WHEREAS, up to 40% of bottled water on the market comes from municipal water systems and the bottled water industry generated \$15 billion in revenues in 2006 from U.S. consumers; and

WHEREAS, bottled water often travels many miles from the source, resulting in the burning of massive amounts of fossil fuels, releasing CO<sub>2</sub> and other pollution into the atmosphere; and

WHEREAS, plastic water bottles are one of the fastest growing sources of municipal waste; and ...



# U. S. Conference of Mayors - 2008

WHEREAS, in the U.S. the production of plastic bottles for bottled water currently requires the energy equivalent of more than 17 million barrels of oil per year – enough to generate fuel for over a million cars for a year – and generates more than 2.5 million tons of carbon dioxide; and

WHEREAS, we applaud the US Conference of Mayors for its National City Water Taste Test, which recognizes all of the great work municipal water systems do for its residents on a daily basis, year after year; and

WHEREAS, the US Conference of Mayors, per Resolution #90 adopted in June 2007, has compiled much information regarding the importance of municipal water and the impact of bottled water on municipal waste.

WHEREAS, the evidence suggests that banning bottled water from government use highlights the importance of municipal water and decreases the impact of bottled water on municipal waste.





# U. S. Conference of Mayors - 2008

NOW, THEREFORE, BE IT RESOLVED, that the US Conference of Mayors encourages cities to phase out, where feasible, government use of bottled water and promote the importance of municipal water.

**Resolution 70** Submitted by:

The Honorable Gavin Newsom  
Mayor of San Francisco

The Honorable Michael Bloomberg  
Mayor of New York City

The Honorable Thomas Menino  
Mayor of Boston

The Honorable Laurel Lunt Prussing  
Mayor of Urbana

The Honorable Martin Chavez  
Mayor of Albuquerque

The Honorable Dan Coody  
Mayor of Fayetteville

The Honorable Will Wynn  
Mayor of Austin

The Honorable R.T. Rybak  
Mayor of Minneapolis

The Honorable David Cicilline  
Mayor of Providence

The Honorable Joseph A. Curtatone  
Mayor of Somerville

The Honorable David Cicilline  
Mayor of Providence

The Honorable Richard M. Daley  
Mayor of Chicago

The Honorable Marty Blum  
Mayor of Santa Barbara

The Honorable Michael Nutter  
Mayor of Philadelphia

The Honorable Manuel Diaz  
Mayor of Miami



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# Bottled Water Insanity Pandemic - 2008

**Better than milk for babies!**

**Saphia Water** - 'designed' by a neonatologist in consultation with lactation experts, will be offered in *Lovingly Lemon, Pacifying Peach* and *Bliss Berry* flavors at Babies R Us and Motherhood Maternity Stores.



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***Saphia Water is the first enhanced water created specifically to respond to obstetricians' universal prescription for pregnant women and breastfeeding mothers to drink the equivalent of at least eight, eight-ounce glasses of healthy water daily.***

**At \$45/case, that's \$1,832 for 9 months**



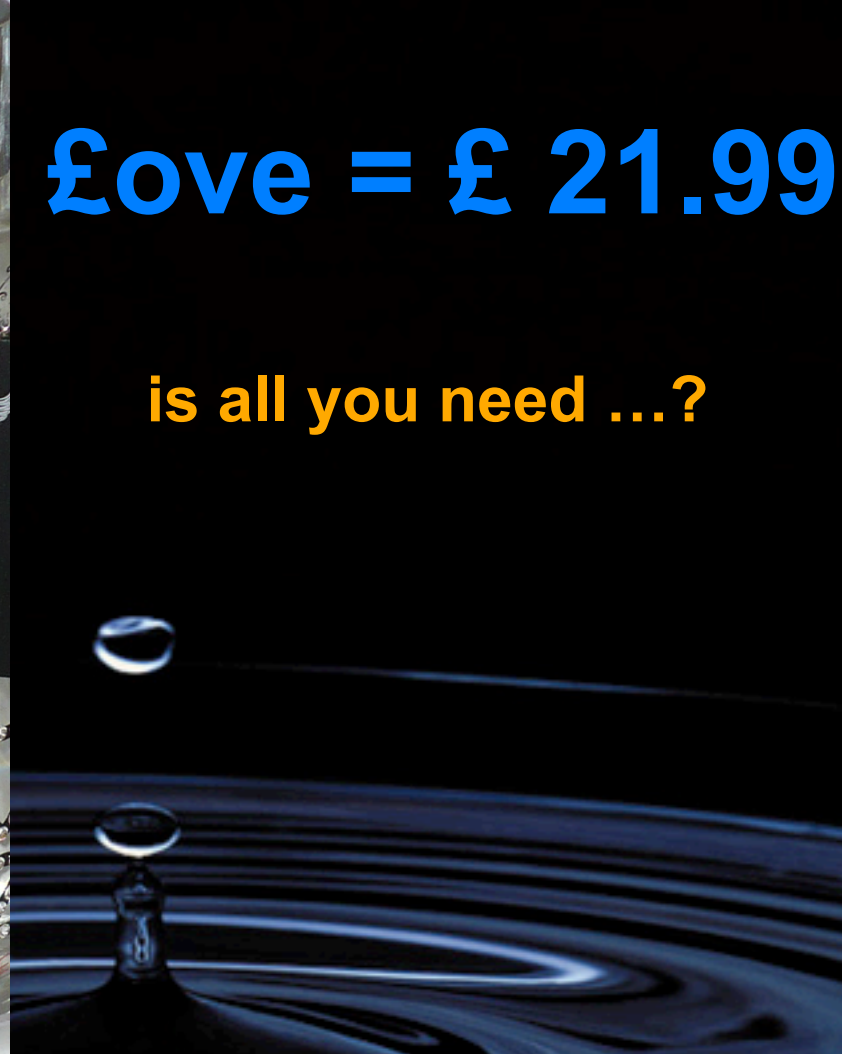
C  
ING





£ove = £ 21.99

is all you need ...?





# Bottled Water Insanity Pandemic - 2008



When your water sommelier brings you a Swarovski crystal-studded bottle, it will contain Bling h<sub>2</sub>o, the most expensive water in the world.

Offered for an exclusive market *'where water is the new wine'*, this \$38 per bottle potable is reputedly Paris Hilton's choice for her Chihuahua.

Your on-line price for the limited edition 'Christmas' Bling (750 ml in a crimson and Peridot green bottle) is \$40.

Bling h<sub>2</sub>o is also available in 'convenient' plastic bottles.

H<sub>2</sub>O'C  
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bling<sub>h2o</sub>

home

pretty face

pretty taste

contact

store

bling<sub>h2o</sub>

*More Than a Pretty Taste*

**IN THE NEWS: Most Expensive Bottled Water**

Fancy water that's costlier than wine. A few months ago, Madonna's pal let it slip that the Material Girlfriend spends \$50000 each month for water blessed by Kabbalah rabbis.

**BLING NOW!**  
at the Bling Store

**\$55 per bottle - girl not included**

Look Who's Talking

**FOX**





# Bottled Water Insanity Pandemic - 2008

Sensing the challenge, H<sub>2</sub>O'C Engineering is in the process of developing a highly advanced water product having the potential to sell for even more than all other competitors.

Condensed in hydrostatically-fused borosilicate capillaries,  
*H<sub>3</sub>O'C bi-ionic electroneutral polywater*  
promises to be a *powerdrink* capable of delivering steroids and male enhancement products in undetectable form.

In addition to saving marriages, *polywater* has already shown its capability for curing cancer and minimizing the effects of the common cold.

What's in it? Don't ask; we won't tell.

But, if you *really* love your family ... !

The logo for H2O'C ENGINEERING is located in the bottom right corner. It features the text 'H2O'C' in a large, bold, sans-serif font, with a stylized wave or droplet shape integrated into the 'O'. Below this, the word 'ENGINEERING' is written in a smaller, all-caps, sans-serif font. The entire logo is set against a background of concentric ripples from a water droplet.

H<sub>2</sub>O'C  
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# **Pharmaceuticals in Water and Wastewater**



**H<sub>2</sub>O'C**  
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# Recreational Drugs in Wastewater

- Oregon State University drug-tested influent at 40 wastewater treatment plants around the country
- A "city with a gambling industry" used five times more methamphetamines than most
- A "fairly affluent community" scored low for everything except cocaine
- Cocaine and ecstasy levels peak on the weekends, but the meth and prescription drugs are constant

# Over-the-Counter Drugs in Drinking Water

Caffeine found at the highest  
concentration of all drugs tested by  
Philadelphia Water

If you drink eight glasses of water a  
day for more than 1,200 years, you'll  
get the amount of caffeine in a single  
cup of coffee (~100mg)





# Over-the-Counter Drugs in Drinking Water

If you drink eight glasses of water a day for more than 40,000 years, you'll get the amount of acetaminophen in a single infant dose (80 mg) of Tylenol.

There is currently no indication that such extremely low concentrations pose any public health risk.



# Pharmaceuticals

"Ask your doctor if \_\_\_\_\_ is right for you"...  
take pills... pee 'em out (& dispose extras)...  
toilet... wastewater plant... river... drinking water  
treatment plant intake... tap

Concentrations in drinking water are in the parts-per-bazillion range.

The real story here is:

- 1) How amazing the detection methods of modern analytical equipment are.
- 2) This stuff that we make persists and is incorporated into the environment.



GlaxoSmithKline



sanofi aventis

Sanofi Aventis



NOVARTIS



MERCK



H<sub>2</sub>O'C  
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# Great Headlines



# Bottled Water Insanity Pandemic - 2008

## Toilet to Tap?

There are no more orange groves in Orange County, California.

Instead, population grows and water is in increasingly short supply. Happily, there is an ever-increasing flow of *wastewater* (a.k.a., *sewage*).

A proposed \$481m *groundwater replenishment system* employing microfiltration, reverse osmosis and UV-peroxide oxidation will make wastewater 'as pure as distilled water'...



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# BPA in Baby Bottles

**March 6, 2009 - San Francisco Chronicle:**

... six major companies have agreed to stop selling hard-plastic baby bottles containing bisphenol A, an industrial chemical suspected of harming human development ...



... some of the companies have been making bisphenol A-free alternatives, including old-fashioned glass baby bottles ...

Studies in lab animals indicate that even small amounts of bisphenol A can damage brain and reproductive systems, alter mammary and prostate glands and lead to heart disease, obesity and diabetes.

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ENGINEERING

# Leaching from Plastic Bottles ?

- **Mineral water packaged in plastic contains roughly twice the amount of estrogen mimics compared with water sold in glass ...**
- **Estrogenic compounds have potential adverse health effects ...**
- **Increased activity in 12 of 20, most of which relied on PET bottles**
- **Female snails, raised in PET bottles, produced more than double the number of embryos compared with snails raised in glass bottles.**
- ***Environ. Sci. Poll. Research, DOI: 10.1007/s11356-009-0107-7***



Water in a glass?



# **H<sub>2</sub>O'C Library**

**www.h2oc.com**

**john@h2oc.com**  
**877-22-WATER**

**H<sub>2</sub>O'C**  
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